

A close-up photograph of a person's head and shoulders from a side-on perspective. They are wearing a white flight helmet with a dark visor and a black communication system. A red safety harness is attached to their chest. The background is a blurred, rocky, and arid landscape, likely the desert floor seen from a helicopter.

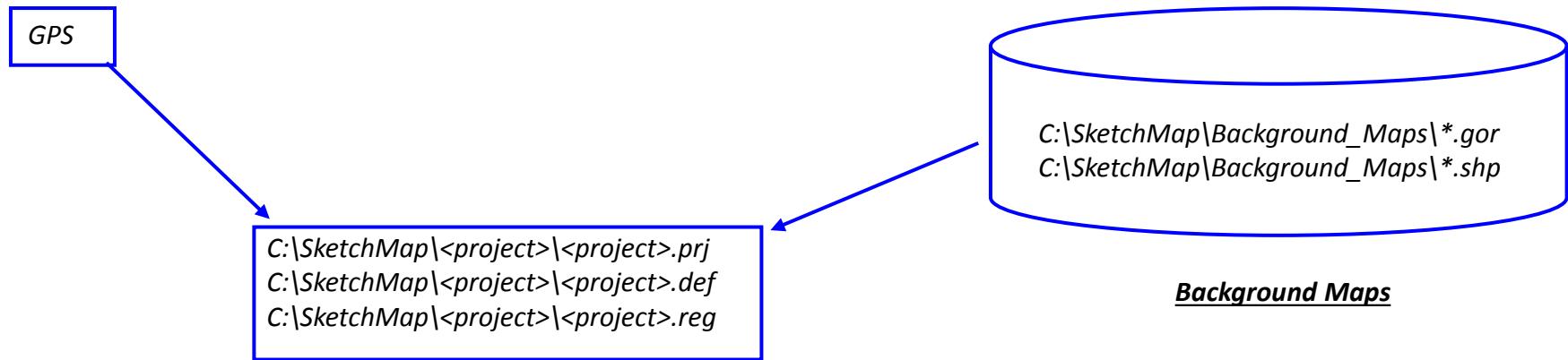
Digital Aerial Sketchmapping of Buffelgrass

Saguaro National Park
September 2012

DASM – GeoLink Project set-up...

- The GeoLink v 6.4 project
 - Consists of .def, .prj, .reg files, keypad files (.pad) , and
 - Data folders - Log and Translate folders
 - Replicate directory structure if copying projects to another PC
 - Use ‘Template_Project’ and ‘Save As’ to create projects...

GeoLink project files..



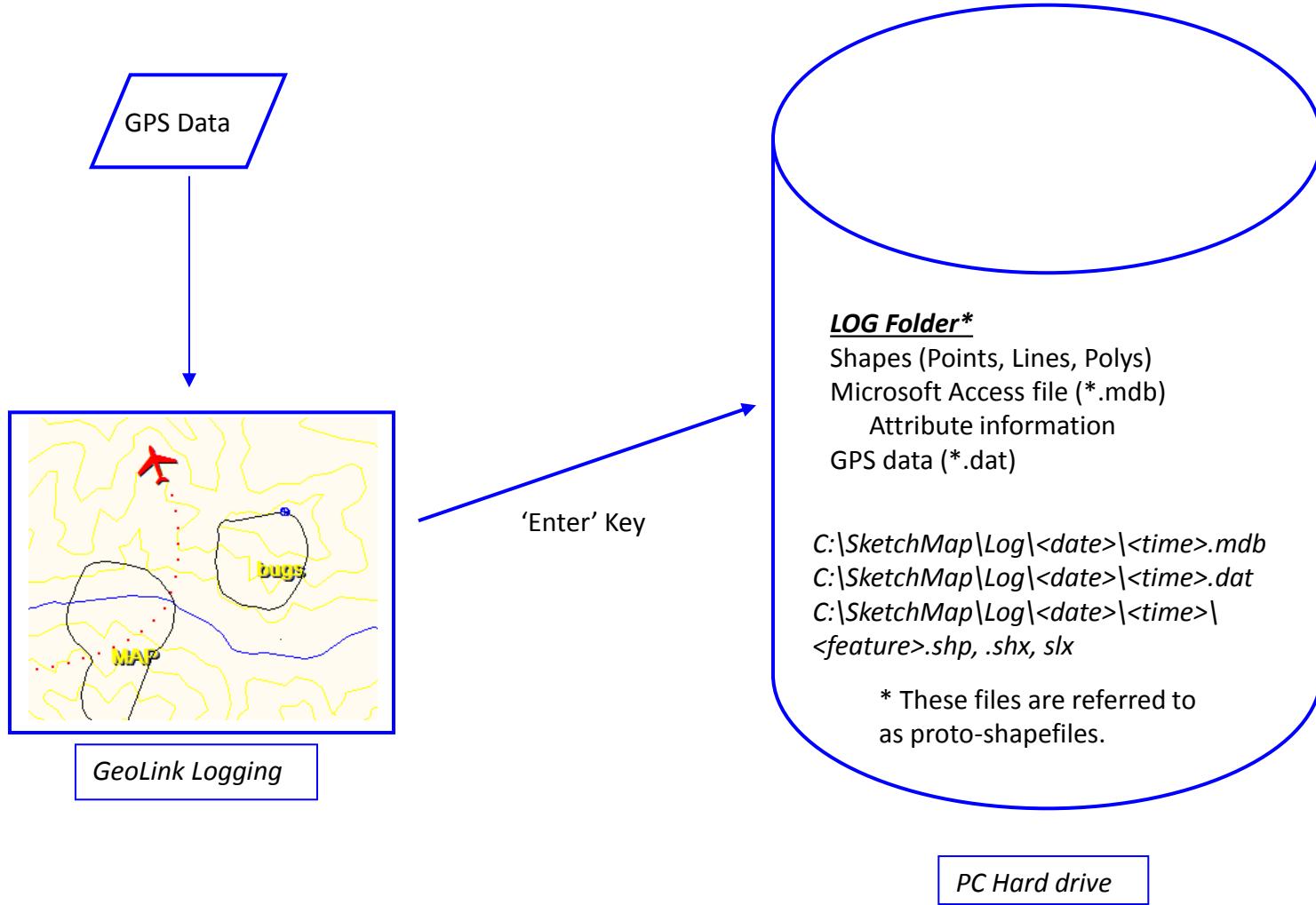
Project contains:

Feature definitions (points, polys)
Table definition for the features, virtual keypads

Display settings for background maps
(Projection, attribute display, theme colors, etc)

GPS info (COM port, type of receiver, baud rate, etc)
Translation settings (Coordinate system output)

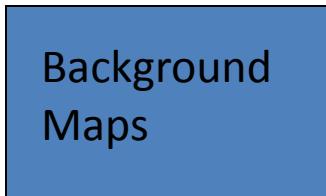
How GeoLink works....logging



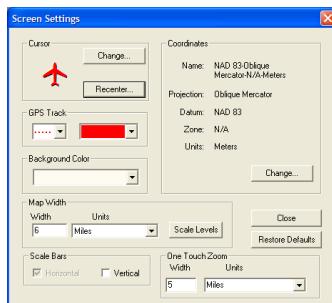
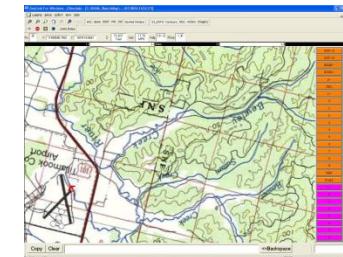
GeoLink Project set-up...cont

- Multiple projects in same directory?
 - All write to same Log and Translate folders
 - ...and the use the same keypad files.
- User interface...
 - Aerial Sketchmapping Customizations turned on
 - Multi-Document Interface (MDI)
 - Active document is the one on top..
 - Toolbars and Menus available based on active document
 - Process menu – access to documents

Coordinate systems in GeoLink....

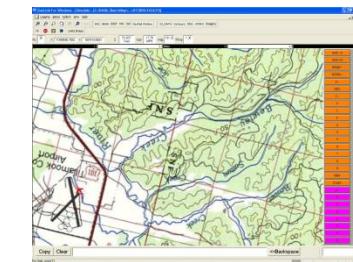


Coordinate system of *each* background map

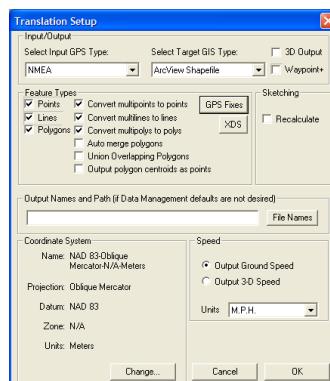


Screen settings dialog.

Coordinate system selected in screen settings display dialog.



Proper display of background maps...



Translate GIS dialog

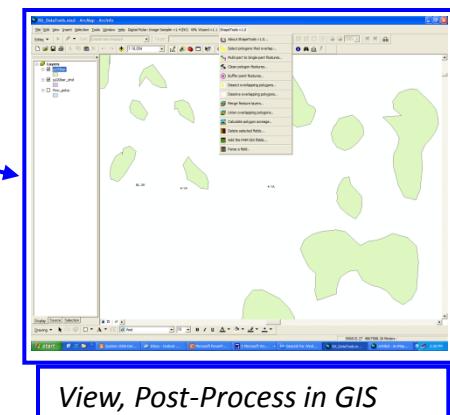
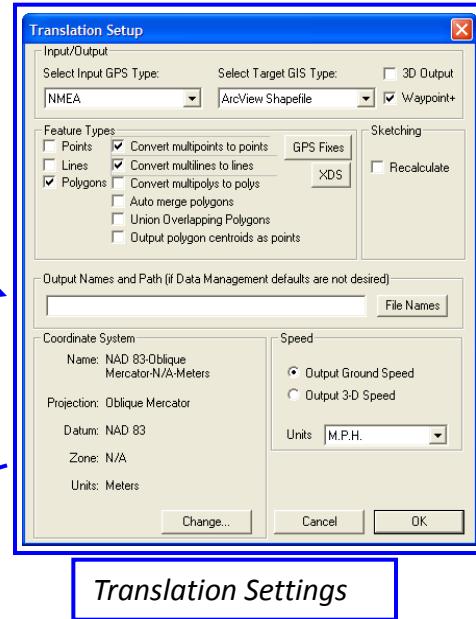
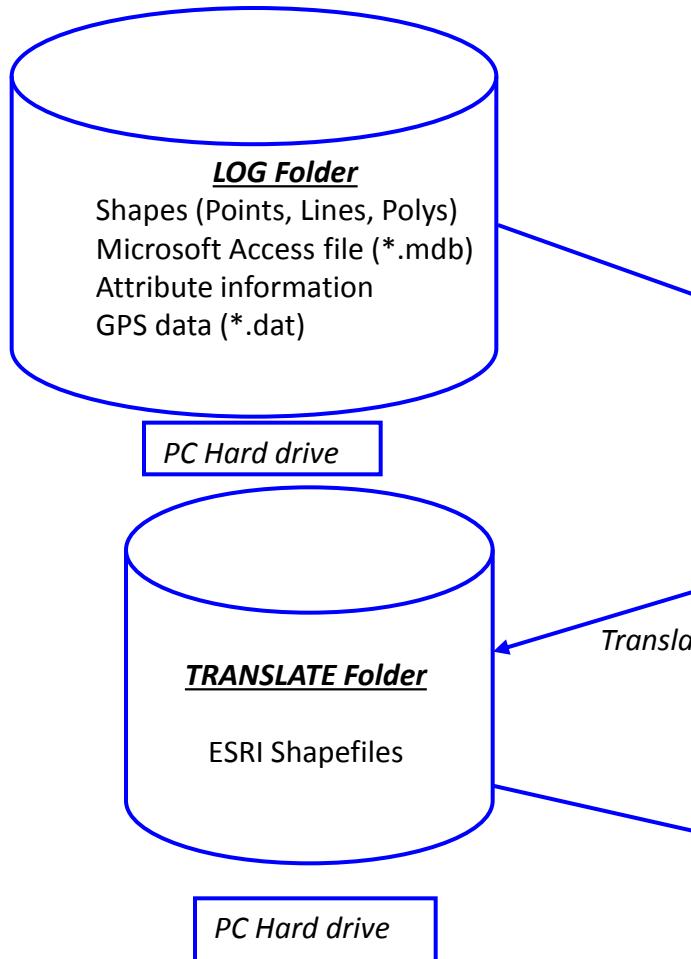
Coordinate system selected in translate GIS dialog.



Selected coordinate system units will display while logging. Data independent.

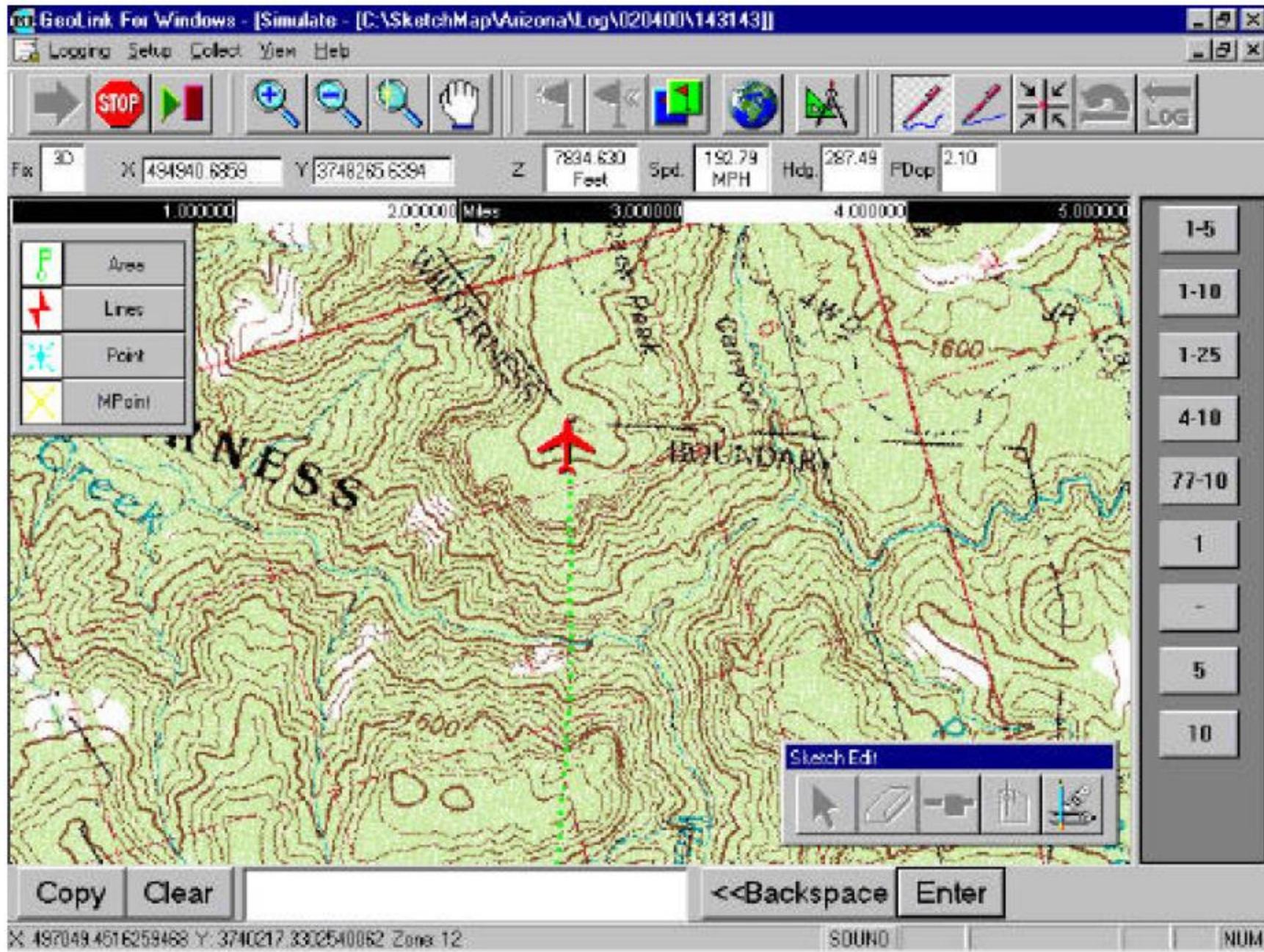
Data translated will be in the specified coordinate system and units.

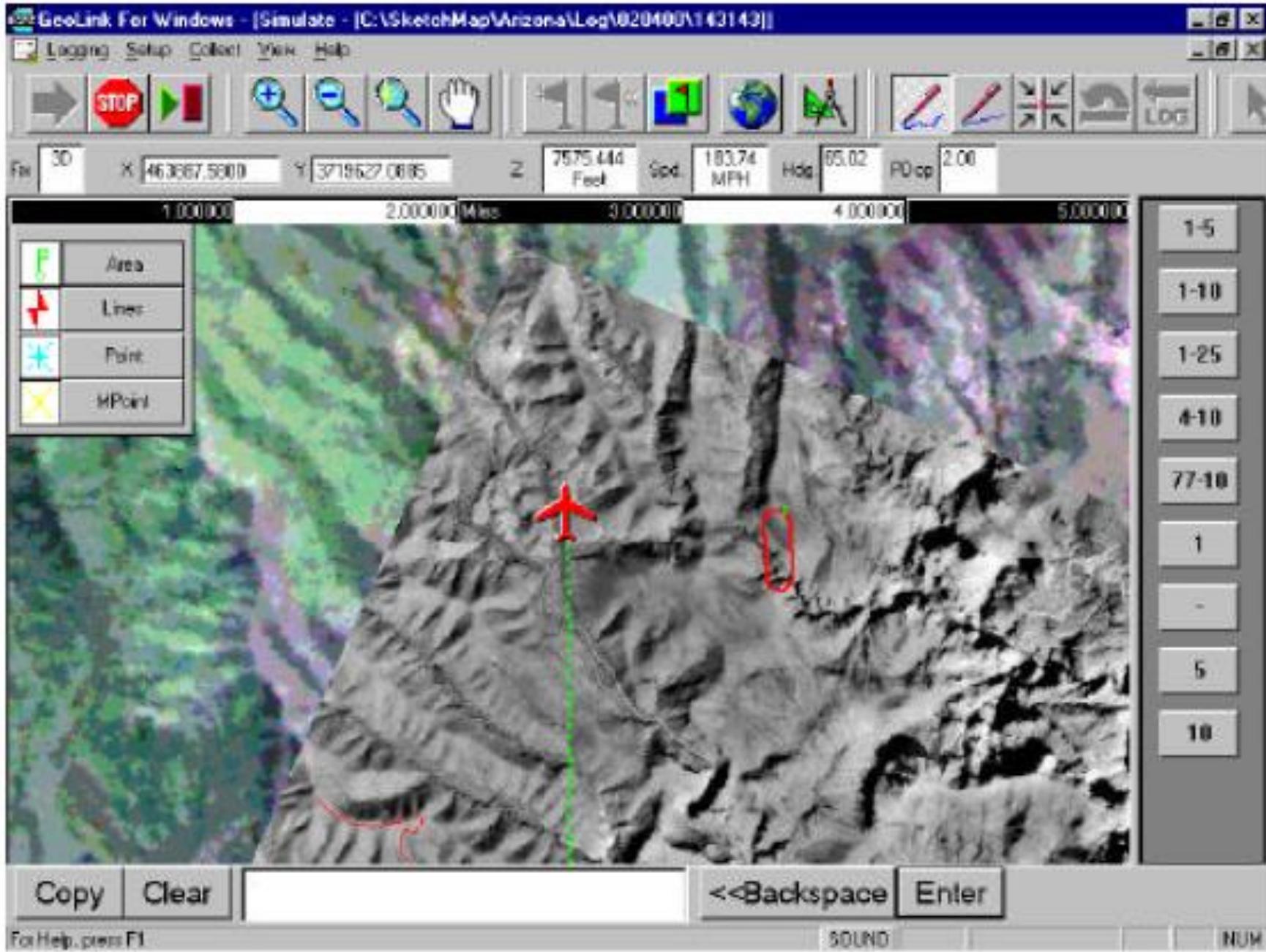
How GeoLink works...translation

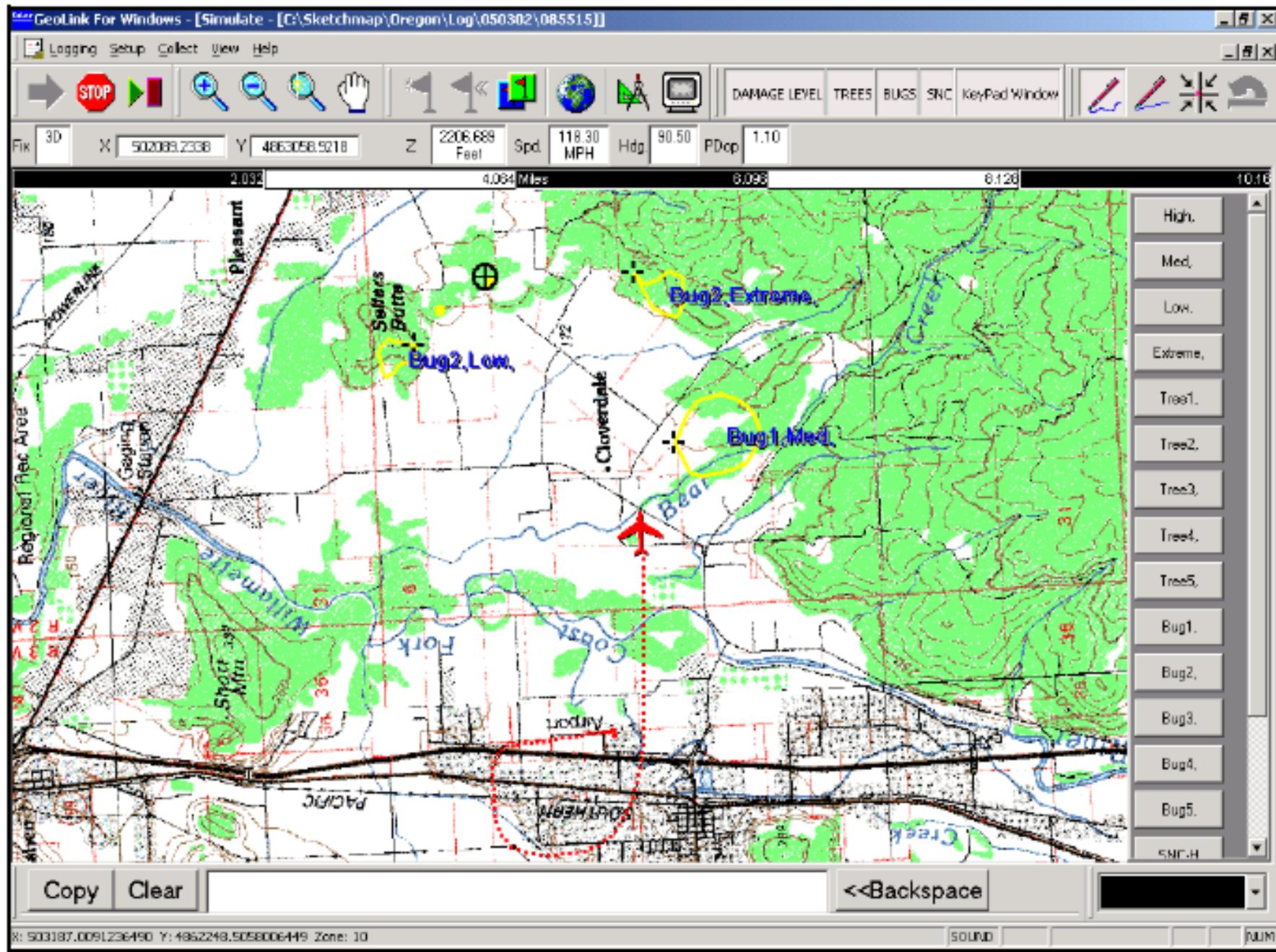


DASM – Mission Planning...

- Digitize flightlines and/or survey area boundaries.
- Organize background map data
 - ◆ USGS DRG, Satellite-based, OrthoPhotos, Shapefiles
 - ◆ Use a logical file structure, such as district/forest boundaries or USGS quad boundaries.
- Develop attributing scheme

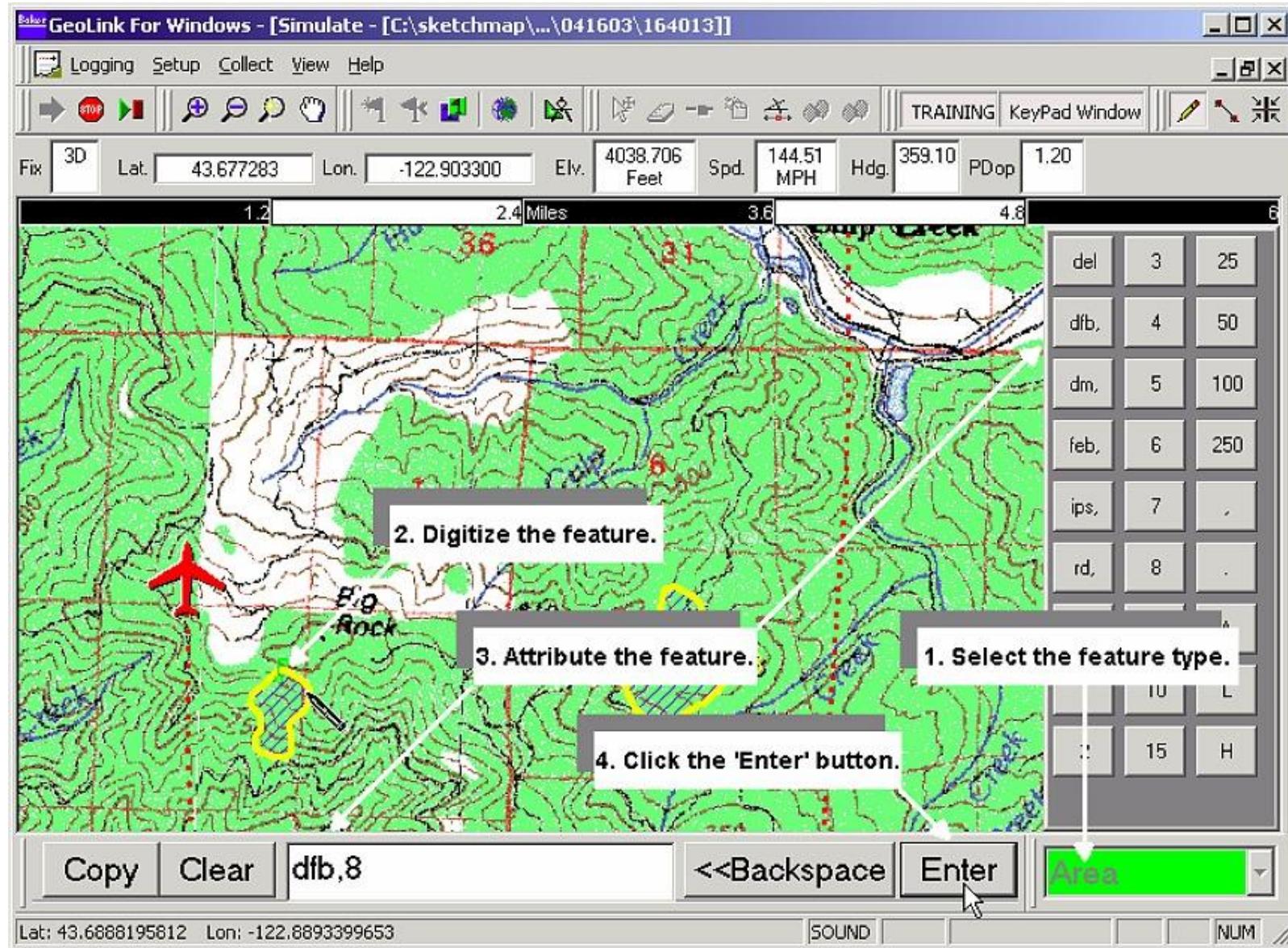








GPS Reference



Digital Aerial SketchMapping...Post-processing

- Post-Processing – What are your goals?
 - Produce polygons from points
 - Rectify polygons that overlap
 - Combine shapefiles from surveys
 - Calculate acres and TPA
 - Create a map of surveyed areas from flightlines
 - Format feature attribute tables
 - Output point coordinates to GPS for field checks

Digital Aerial SketchMapping...Post-Processing

- Translate data from GeoLink
 - Projection considerations
- Data editing (QA/QC)
 - Softcopy editing using ArcView GIS
 - Changing feature position or boundary
 - Deleting erroneous features
 - Checking feature attributes















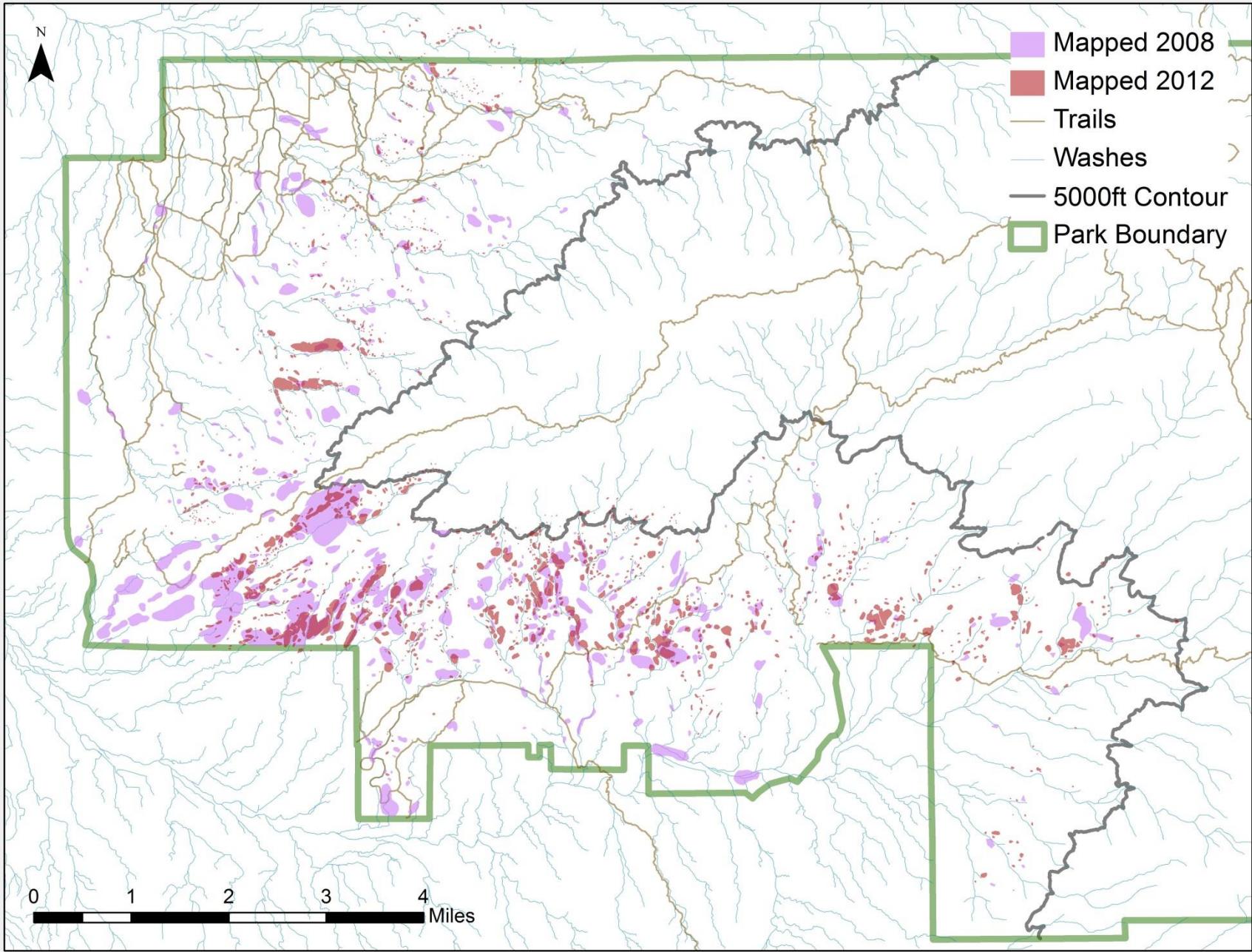




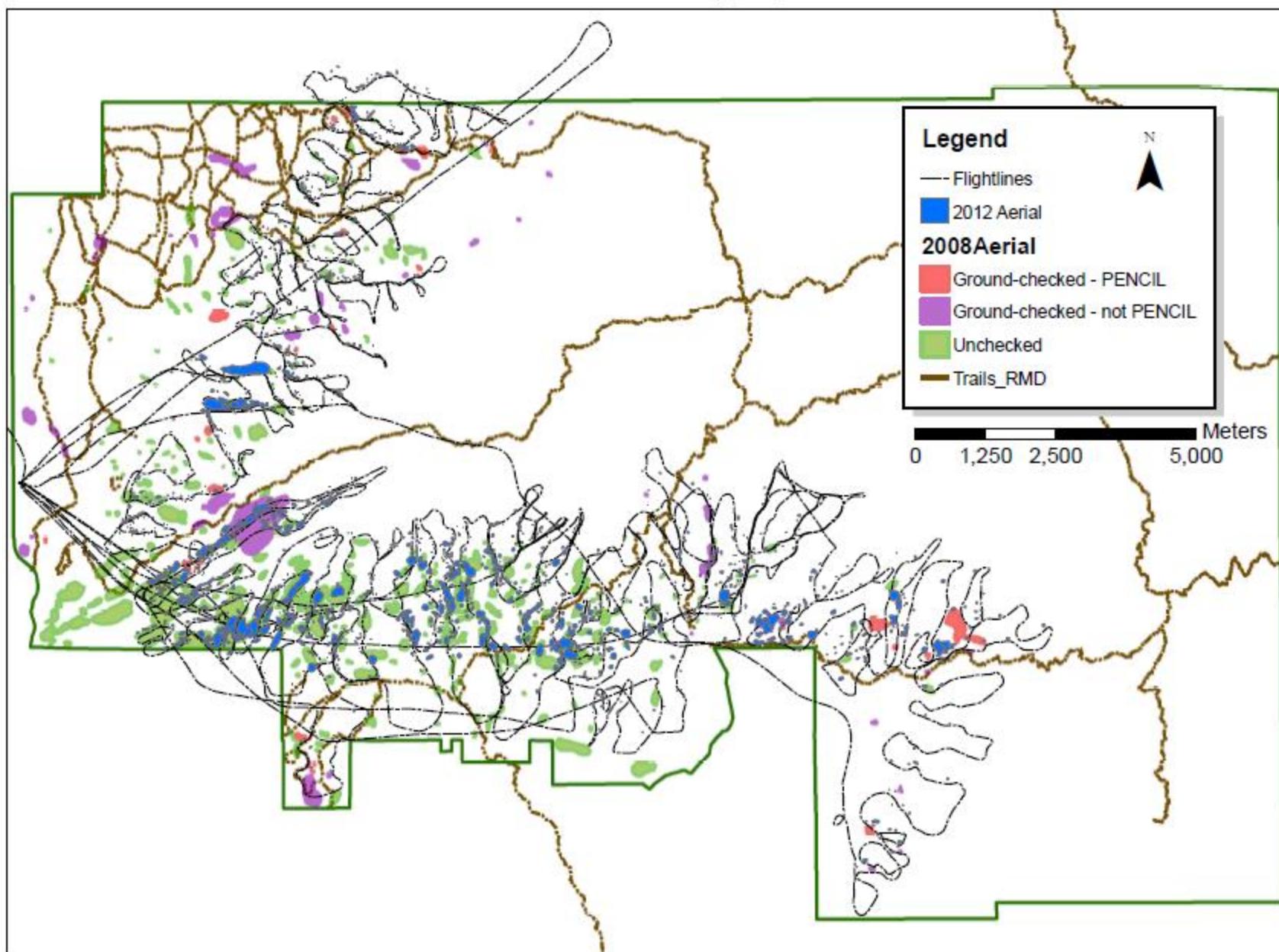




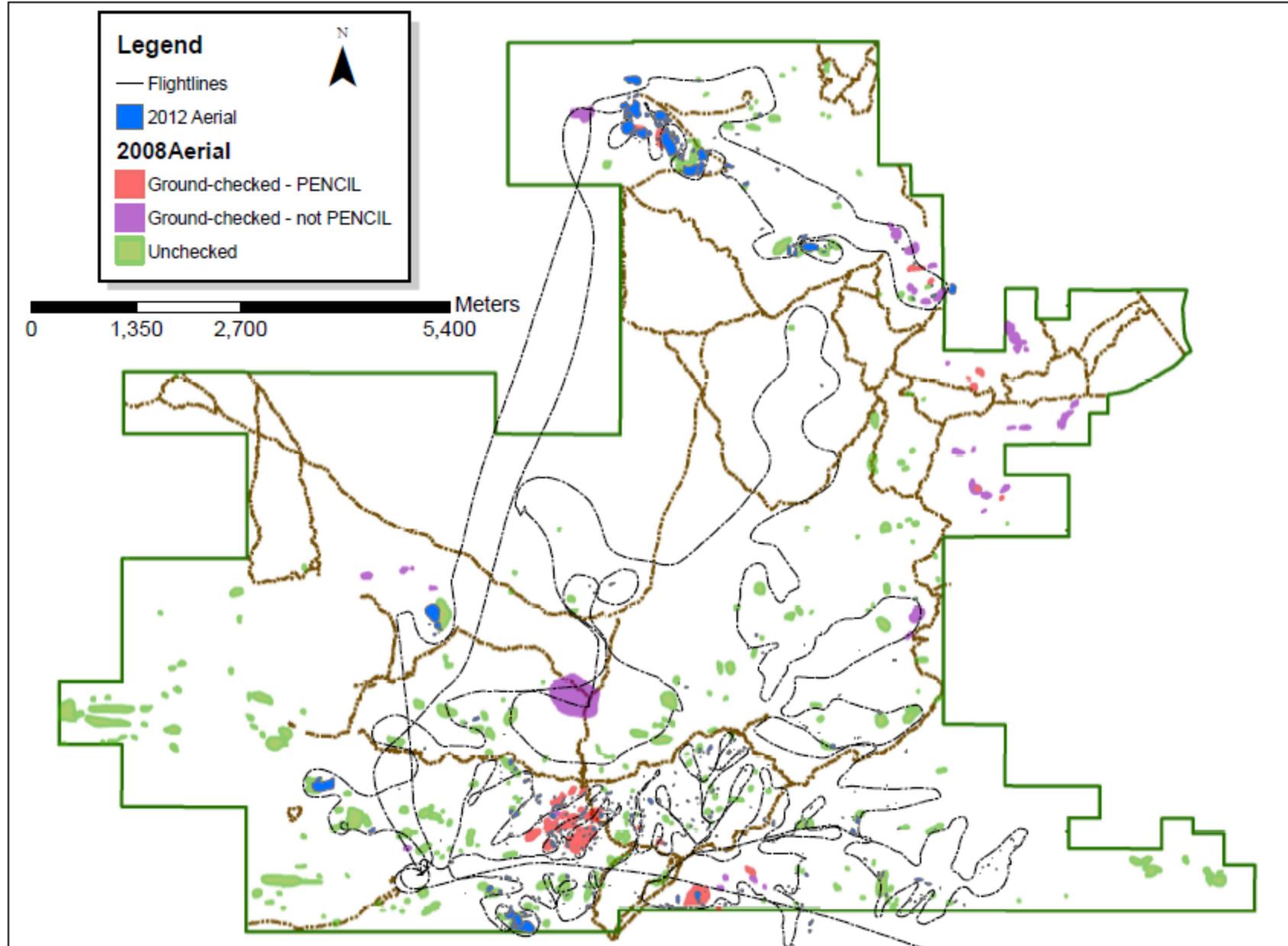




RMD Aerial Mapping



TMD Aerial Mapping



Any Questions?

